

ABSTRACT OF THE DISCLOSURE

A small-sized and low-cost silicon platform for optical modules which enables high-speed transmission. A conductor pattern is formed on an oxide layer formed on the surface of a silicon substrate through a dielectric film. A hole extending from the surface of the dielectric film to the oxide layer is formed in the dielectric film at a position for the formation of a bonding pad. A conductor material is directly formed on the oxide layer exposed to the bottom of this hole. This conductor material constitutes a bonding pad portion electrically connected to the conductor pattern.